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ABSTRACT

Changes in the attitudes of 1,950 initially rural Pennsylvania individuals toward selected aspects of traditional morality were examined by comparing the expressed opinions of persons surveyed in 1947, when adolescent, with their responses in 1971, when in their early forties. In both 1947 and 1971 the subjects were asked to respond to an identical series of 12 Likert-type attitude items designed to measure acceptance of selected aspects of traditional morality. While each of the items focused on some aspect of traditional behavior, 5 items referred to young people or youth activities (loafing uptown, staying out late, failure in school, spending money, and using makeup). The remaining 7 items referred to adult or ageless behavior (irregular church attendance, divorce, drinking, smoking, card playing, Sunday movies, and Sabbath labor). Findings indicated that: (1) in general, responses were more permissive with maturation, though there was less liberalization of attitudes toward the behavior of youth; (2) not all subjects became liberal with age; therefore, experience, rather than age per se, was the more probable explanation for attitude change; (3) of 9 social characteristics expected to influence change, the 1 most consistently associated with lack of attitude change was frequency of church attendance, though there was some positive relationship to place of residence, educational and income levels, and sex. (JC)

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MATURATIONAL CHANGES IN SELECTED ATTITUDES
TOWARD TRADITIONAL MORALITY:
A 24-YEAR FOLLOW-UP STUDY

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The Problem

How do the ideas, attitudes, and beliefs of people change as they grow older? Answers to this question logically can take several forms. Maturity may bring with it crystallization: adults become "set" in their ways, holding to traditional notions, unable or unwilling to bend to the changing circumstances in their surroundings. Another possibility is that an increasing variety of social contacts and experiences, characteristic of maturing persons, leads to a liberalizing of ideas and an acceptance of attitudes and behaviors previously rejected. Yet a third possibility is that the relationship between age and attitude is curvilinear: liberalization occurs up to a point, but then crystallization takes over.

Unfortunately, there is a dearth of relevant research available for sorting among these possibilities. Most of the studies purporting to comment on the changes in persons across time are inadequate since they deal with cross-sectional data drawn from differing age groupings in the population at a single point in time, rather than following the same persons over the years (Bischof, 1969; Vaillant and McArthur, 1972). Any such reports must be inferential at best. To address directly the question of how attitudes change with increasing age, it is necessary to study the same persons across time. Such a procedure, however, is a costly and hazardous venture (Crider, et al., 1973). Consequently, longitudinal research focusing on long-term changes is limited (Kagan, 1964;

Vaillant, 1972).¹ Moreover, most of the relevant research has not dealt with attitude structure² but, rather, has focused on one or more of the following: Intelligence and Intellectual functioning (Terman and Oden, 1959); social adjustment (Vaillant and McArthur, 1972); mental health (Cox, 1970; Peskin and Livson, 1972); or, personality structure (Block, 1971; Kagan and Moss, 1962; Tuddenham, 1959; Maas and Kuypers, 1974; Peck and Havinghurst, 1962). Whatever their diversity in methods, subjects, instruments, and focus, one point seems to have emerged from the research. In the words of Norma Haan (1972:409) "Few of the variables [used] showed great continuity even for the subjects who changed the least in an overall sense." Another study put the matter more directly: "The clear result, consistent for both sexes, was that adult psychological health was minimally, if at all, predictable from behavior measures taken at the age period . . . 14-16" (Peskin and Livson, 1972:346).

Why should people be expected to change their outlooks across time? What factors are associated with changes? While simple biological maturation could be responsible, in some measure, for alteration in an individual's attitudes, it seems more likely that such changes are socially learned or acquired. Exposure to differing ideas and perspectives and involvement with a variety of social roles is likely to be associated with changing outlook. Though longitudinal research to support this expectation is limited, cross-sectional studies have shown that individuals with exposure to more heterogeneous and varied circumstances are less likely to endorse traditional modes of behavior than are individuals whose experiences are more limited (Lowe and Peek, 1974). Thus, for example, persons with high levels of education or those with urban backgrounds tend to be more

accepting of nontraditional Ideas than their counterparts with less education or rural backgrounds. While less obvious, other factors can either enhance or limit the exposure of persons to cultural heterogeneity.

The following variables were chosen for analysis: sex, employment status, Income (as an Indicator of social class), educational level, marital and family status, residential history, and frequency of church attendance. Because of their expected exposure to a wider range of differing circumstances, males, employed persons, Individuals with more Income, persons with higher education, urban residents, married persons, and Individuals with children, were expected to have changed more than their opposites. Frequency of church attendance was believed to indicate the degree of Involvement In organized Judeo-Christian religious activities. This, In turn, was expected to relate positively to continuing acceptance of Ideas of traditional morality.

Objectives of the Study

Changes In the attitudes of Individuals toward selected aspects of traditional morality were examined In this study by focusing on the expressed opinions of persons who had been surveyed when they were adolescents and again when they were In their early forties. Specifically the study had two objectives:

- 1) To assess the direction and degree of change that had occurred In the attitudes of these people;
- 2) To ascertain the relationship between degree of attitude change and selected variables believed to be conducive to or Inhibitive of such change.

The Data

Longitudinal research involving people from nonmetropolitan areas in Pennsylvania provided the data for the present analysis. In 1946-47, all members of the sophomore classes in 74 Pennsylvania schools completed questionnaires as part of a study of rural youth undertaken by the Department of Agricultural Economics and Rural Sociology at The Pennsylvania State University. A total of 2,806 subjects participated in the survey. In 1971, 2,081 of these people were located and reinterviewed. From these, 1,950 completed questionnaires containing the series of attitude items used in the present analysis. Although all of the respondents had lived at least part of their adolescent years in rural Pennsylvania, by 1971 they were scattered throughout the country in urban as well as rural areas.³

In both 1947 and 1971 each subject was asked to respond to an identical series of 12 Likert-type attitude items designed to measure his or her acceptance of selected aspects of what we have called traditional morality. The model for arch traditionalism was the strict, ascetic, puritanical individual. This person was conceived of as one who:

- treats the Sabbath as holy and not secular;
- sees marriage as irrevocable;
- considers church participation a must;
- regards drinking, smoking, and card playing as activities promoted by the devil;
- feels makeup is the mark of a "fallen woman";
- scorns loafing as loathful;
- believes failure in school is unforgivable; and
- holds that youth should be obedient to parents.

This is the picture often given in literature as the stereotype of the typical small town or farm dweller in America.

While each of the items focused on some aspect of traditional behavior, five referred specifically to "young people," "high school students" or to activities primarily appropriate to youth. These "youth items" consisted of questions dealing with loafing uptown, staying out late, failure in school, spending money, and the use of makeup. The remaining seven items were more general in their focus and referred to behaviors relevant to all age categories or primarily to adults. Included in this category of "general items" were the questions of irregular church attendance, divorce, drinking, use of tobacco, card playing, Sunday movies, and Sabbath labor.

The subjects were asked to indicate whether they "strongly agreed," "agreed," were "undecided," "disagreed," or "strongly disagreed" that the relevant items of behavior should be permitted and/or not criticized. The degree of traditionalism was measured by assigning scores to each of the response categories with "five" the most and "one" the least traditional answers. Thus, the higher the score, the more traditional or less liberal and permissive was the response.

Analysis

Changes in attitudes were measured by comparing each subject's 1947 traditionalism score with his 1971 score and the statistical significance of the difference tested by means of a t-test for paired data, Table I. All seven of the general items showed significant changes away from a traditional position over the 24-year period under study. That is, overall the respondents became more permissive or accepting of irregular church attendance, divorce, drinking alcoholic beverages, the use of

tobacco, card playing, Sunday movies, and Sabbath labor. The largest change occurred in the item dealing with drinking.

The youth items, however, presented a somewhat different picture. For three of the questions (staying out late, failure in school, and the use of makeup) the overall change was again toward greater permissiveness, but the amount of change was, in most cases, less than that for the general items. Moreover, for the remaining two questions, there were statistically significant changes toward less permissiveness. That is, as these subjects matured from approximately 16 to about 41 years of age, they become less accepting of young people loafing uptown and less permissive of the ways young people spend their money.

The same pattern can be seen by examining the proportion of subjects who changed in each direction over the time span studied, Table I. In every case, the proportion who became more permissive was higher for the general than for the youth items; in all but one case (use of makeup), the proportion who became more conservative over the 24 years was greater for the youth items.

The data suggest that, in general, attitudes toward traditional modes of behavior have become more liberal and permissive as these people matured. The degree of such change, however, and in some cases whether such change occurred at all, was dependent upon the nature of the behavior itself. Adult-types of behavior seemed to be looked upon less critically by people in adulthood than in adolescence. This increasing permissiveness was less apparent in regard to the question of young peoples' behavior. Indeed, there was some evidence that with maturity adults became more critical of certain aspects of youths' behavior.

Certain other observations can be made concerning the nature and type of attitude change which occurred over the 24 years studied. It is interesting to note that, with the exception of the drinking item, the percentage of subjects who did not change their responses at all during the period ranged from 26 to 46 percent. Even given the likelihood that, with five response-category items, one-fifth of the answers would be the same by chance, the incidence of "no change" seems substantial. In short, while change was the norm, a sizable proportion of the individuals reported identical responses to the attitude questions at two points in time nearly a quarter of a century apart!⁴

The overall distribution of answers to the 12 items uncovered no consistent tendency for either young people or adults to choose extreme positions (strongly agree or strongly disagree), Table 2. However, the percentage of "undecided" responses did decline sharply across time. For 11 of the 12 items, the proportion of persons who indicated that they were "undecided" was lower in 1971 than in 1947.⁵ Thus, the incidence of undecided responses in 1947 ranged from 11 to 26 percent; in 1971 the range was just 6 to 17 percent. The respondents clearly tended to become more decisive in their opinions as they aged.

It should also be noted that the general shift from less to more permissive attitudes does not mean that all persons changed uniformly and in a liberal direction. On the contrary, while changes to an adjacent answer category were most common, many people shifted their attitudes more than this and some changed from strongly agree to strongly disagree or vice versa. Such differences among individuals in the amount and direction of attitude change was underscored by the magnitude of the correlation

coefficients measuring the degree of association between 1947 and 1971 scores. These coefficients would have all equalled 1.00 if each subject changed his or her response in the same direction and to the same degree across time. However, none was greater than .28 and more than half of them were less than .15, Table 3. While in every case the correlations were statistically significant, their small magnitude means, in absolute terms, that the 1947 answers were not good predictors of 1971 choices to the same questions. In other words, people changed at differing rates and in differing directions such that those subjects with the lowest scores in 1947 were not necessarily those with the lowest scores in 1971.

If people differ from one another in the degree to which they change their attitudes across time, it seems reasonable to ask next what factors are related to such change. The suggestion made earlier was that people who are exposed to a variety of experiences will be more likely to change than those who are not. Accordingly, nine variables were selected for study. To simplify the analysis, each was measured by a two-category scale as follows:

sex (male-female)

education (some college experience - no college experience)

employment status (employed - unemployed)

Income^a (\$10,500 or more - less than \$10,500)

marital status (presently married - unmarried)

parental status (one or more children - no children)

place of residence (town or urban - farm or open country nonfarm)

length of time in present residence (10 years or more - less than 10 years)

frequency of church attendance (attends once a week or more often - attends less than once a week).

For purposes of analysis, each of the independent variables was treated by a single dummy variable. In each case, the first of the two categories listed above was coded "1," the second as "0." Thus, frequency of church attendance and time in present residence were expected to relate negatively to changes in attitudes; the remainder of the characteristics were expected to relate positively.⁶

The amount of attitude change was assessed by subtracting the 1971 traditionalism scores from the 1947 scores for each item for every respondent. These "difference scores" could (and did) range from -4 to +4 for any single question. Negative scores represented a change from a more liberal toward a more conservative stance; positive scores reflected the reverse.

The difference scores were highly interrelated with the 1947 scores since the direction and degree of possible change was determined by the respondent's initial answer. For example, a person with a 1947 score of 1 (strongly agree) could not become "more liberal" since the scale did not provide a more liberal response; an "undecided" response in 1947 was limited to ±2 points of change; and a "strongly disagree" answer in 1947 allowed for only negative change. Accordingly, correlations of the 1947 scores with the difference scores ranged from .61 to .71 for the 12 items. The closeness of these associations underscored the need to control on 1947 scores to obtain a more accurate appraisal of the relationships between the independent variables used and attitude change per se.

Multiple regression techniques were used for the analysis. This procedure allowed for statistical control of the 1947 scores and permitted an assessment of the "net relationship" between each of the independent variables and the difference scores. To this end, the difference score

for each item was used as the dependent variable in a regression equation and the nine personal and social characteristics, together with the corresponding 1947 item score, were incorporated as the independent variables. Standardized regression coefficients (beta coefficients) were calculated and tested for significance.

The most striking relationships were those associated with frequency of church attendance. This variable related significantly and in the expected direction to 10 of the 12 change scores. That is, attending church once a week or more often was associated with less liberalization of attitudes than was a lower rate of attendance. Both place of residence and income were significantly associated with 6 of the 7 general items, although the beta coefficients were all markedly lower than those for church attendance. As predicted, both urban residence and high income had higher difference scores than rural residence and low income. Education related significantly to 5 of the general and 2 youth items, higher education being associated with greater liberalization of attitudes. Here again, however, the beta coefficients were generally much lower than those found for the church attendance variable. Sex was significantly associated with 4 general and 2 youth items, but the relationships were inconsistent. Females changed more toward a liberal stance in regard to divorce, card playing, failure in school and the use of makeup; males altered their opinions more in regard to drinking and the use of tobacco. None of the other variables was closely or consistently related to the measure of change.

Conclusions

What can be concluded from these findings? First, in regard to

the direction of attitude change, the present study has suggested that, in general, with maturation, people become more liberal or permissive of certain aspects of traditional morality, particularly those concerned with adult behavior. Liberalization of attitudes in regard to the behavior of young people is less pronounced. Indeed, for two of the items included in the present study, this trend was reversed with the subjects becoming more critical and less permissive as they matured. Whether these same changes would be found in another time period or in other populations is problematic. The present data, however, are suggestive of the kinds of maturational changes which may occur.

Second, it should be noted that there were considerable differences among individuals in the direction and degree of attitude change. Not everyone became more liberal across time nor was the amount of change the same for all people. These observations suggest that it is unlikely that simple maturation per se can explain the changes which did occur. Rather, it seems probable that differences in the social experiences of people are involved.

Of the 9 social characteristics expected to relate to change, 1 variable was especially noteworthy in terms of the consistency and closeness of its association with attitudinal change - frequency of the respondent's church attendance. Those who attended once a week or more often evidenced significantly less change toward a liberal or permissive position than did those who attended less often. While three of the items on the questionnaire were clearly church or Sabbath related and hence might be expected to be associated with the frequency of a person's church attendance the remaining items were less directly "church-linked." Certainly the oft-cited secularization of society would lead one to expect

that the church's influence on individual attitudes should not be great in modern American society. The finding of contrary evidence suggests that the church may indeed be a continuing important force in structuring people's ideas and attitudes.

Place of residence was related to most of the general items supporting the suggestion often made by rural sociologists that rural dwellers are slower to change their ideas than their urban counterparts (Willits, et al., 1973). Educational and income levels, along with sex, were the only other variables showing fairly widespread relationships. With the exception of church attendance, however, the relationships were not close. Clearly, more longitudinal research focusing on the same individuals across time and additional analysis examining other possible change influences are necessary if we would truly understand why individuals alter their ideas across time. The present study is, at best, exploratory.

Table 1. Changes in Traditionalism Scores, 1947 to 1971 for 12 Attitude Items.

Item	Traditionalism Scores			t-value	Direction of Change		
	1947	1971	Difference		Less Permissive	No Change	More Permissive
-----Mean Score-----							
General Items							
Regular attendance at church is not necessary in order to be a good community member	3.51	2.61	.90	25.93***	15.0	27.5	57.5
When a man and his wife feel that they can no longer remain happily married, their divorce should be granted	2.57	2.42	.15	4.72***	28.4	33.5	38.1
People should not be criticized for drinking of alcoholic beverages	3.99	2.74	1.25	35.56***	11.7	19.9	68.4
The use of tobacco should not be criticized	3.44	3.04	.40	11.92***	24.2	31.2	44.6
Card playing should be accepted without criticism	2.86	2.25	.61	21.64***	14.6	34.5	50.9
Sunday movies should be accepted without criticism	3.07	2.41	.66	21.75***	15.4	32.3	52.3
Sabbath labor should not be frowned upon in these modern times	3.32	2.71	.61	17.08***	20.6	26.5	52.9
Youth Items							
Young people should not be criticized for loafing uptown	3.39	3.54	-.15	-4.37***	39.7	30.7	29.6
The matter of staying out late should be left up to the persons involved	2.99	2.83	.16	4.31***	30.4	32.1	37.5
Pupils who fail subjects in school should not be criticized	3.07	3.00	.07	2.06*	32.0	32.2	35.8
High school age people should be able to spend their money as they see fit	2.71	3.58	-.87	-27.23***	57.3	29.1	13.6
People should accept the use of makeup by girls	2.46	2.34	.12	4.41***	23.9	45.6	30.5

* Significant .05
***Significant .001

Table 2. Distributions of 1947 and 1971 Responses to the 12 Attitude Items.

Item	Strongly Agree		Agree		Undecided		Disagree		Strongly Disagree	
	1947	1971	1947	1971	1947	1971	1947	1971	1947	1971
-----percent-----										
General Items										
Church attendance	3.7	15.0	21.3	48.3	11.4	6.4	47.8	21.7	15.8	8.6
Divorce	11.6	18.5	44.3	45.8	25.8	16.4	11.7	14.0	6.6	5.3
Drinking	4.2	9.4	8.8	47.9	11.6	11.9	35.0	21.3	40.5	9.6
Tobacco	2.6	5.9	22.5	37.9	19.0	14.1	39.6	30.4	16.3	11.7
Card playing	5.2	14.7	39.5	60.4	25.1	12.8	24.6	9.8	5.6	2.3
Sunday movies	6.1	14.2	32.4	54.2	21.5	13.0	28.1	13.1	11.9	5.4
Sabbath labor	5.8	11.8	22.9	44.4	21.0	13.0	34.0	22.0	16.3	8.7
Youth Items										
Loafing uptown	4.4	3.4	17.2	21.5	23.3	12.6	45.0	42.9	10.1	19.6
Staying out late	8.9	11.7	34.2	42.8	12.8	6.1	37.1	29.2	7.0	10.1
Fallure in school	7.0	8.3	32.0	35.9	17.4	12.3	33.8	34.4	9.8	9.1
Spending money	8.8	1.5	46.0	21.1	14.8	8.7	26.4	55.7	4.0	13.0
Use of makeup	9.9	7.3	54.0	65.4	20.1	14.9	12.0	10.5	4.0	1.9

Table 3. Correlation Coefficients for the Relationships
Between 1947 and 1971 Attitude Responses.

Item	Correlation Coefficient
General Items	
Church attendance	.15***
Divorce	.16***
Drinking	.10***
Tobacco	.15***
Card playing	.18***
Sunday movies	.28***
Sabbath labor	.12***
Youth Items	
Loafing uptown	.06*
Staying out late	.13***
Fallure in school	.13***
Spending money	.10***
Use of makeup	.14***

*Significant .05

***Significant .001

Table 4. Beta Coefficients For The Net Relationships of Personal and Social Characteristics to Attitudinal Difference Scores, With Controls On 1947 Item Scores.

Item	Sex		Education		Employment Status		Income		Marital Status		Parental Status		Place of Residence		Time in Pres. Residence		Freq. of Church Attendance	
	β	F	β	F	β	F	β	F	β	F	β	F	β	F	β	F	β	F
General Items																		
Church attendance	.01	.30	.06	11.43***	.03	1.60	.03	2.57	-.04	2.68	.02	.74	.00	.05	-.02	1.00	-.25	195.70***
Divorce	-.05	5.55*	-.01	.41	.04	3.68	.04	5.10*	-.03	1.38	-.03	1.79	.06	11.86***	-.05	7.13**	-.19	104.98***
Drinking	.05	5.21*	.04	4.43*	.02	.81	.08	21.08***	.03	1.45	-.01	.49	.05	8.17**	-.02	1.65	-.16	78.98***
Tobacco	.05	6.06*	-.03	2.47	.02	.82	.04	4.19*	.01	.26	.00	.00	.08	19.88***	.01	.47	-.12	41.90***
Card playing	-.04	4.50*	.04	5.64*	.03	2.66	.08	20.44***	.01	.11	-.01	.10	-.04	4.70*	-.02	.90	-.13	60.07***
Sunday movies	-.01	.26	.06	10.53**	.04	4.21*	.06	11.21***	-.01	.08	.02	.53	.04	3.90*	-.03	3.26	-.17	91.12***
Sabbath labor	-.03	2.94	.06	10.67**	.05	5.89*	.07	15.22***	-.03	2.45	.03	1.90	.05	9.77**	-.05	9.48**	-.18	109.57***
Youth Items																		
Loafing uptown	.02	.63	.01	.18	-.01	.20	.02	.84	-.03	1.83	-.01	.19	-.01	.35	-.01	.51	-.01	.20
Staying out late	-.04	3.41	.02	.77	.02	.94	.04	3.43	-.01	.12	-.06	7.50**	.02	1.76	.02	1.04	-.10	30.77***
Failure in school	-.08	12.60***	.00	.03	.01	.08	.00	.00	-.01	.10	-.01	.16	-.03	3.13	.03	3.08	-.02	1.25
Spending money	-.01	.18	.04	4.33*	-.02	.89	.01	.43	.00	.01	-.01	.08	.00	.03	-.01	.59	-.05	9.72**
Use of makeup	-.07	10.98***	.08	23.06***	.02	1.62	.03	3.34	.01	.07	.00	.00	.02	2.21	-.01	.76	-.06	13.74***

* Significant .05

** Significant .01

*** Significant .001

Footnotes

¹Longitudinal research, as reported in the literature, suffers generally from certain shortcomings. The time span covered is too brief; often being four or less years. Ordinarily, the subjects studied are not a cross-section of the general population; rather, they tend to be college students or other select groups institutionally captive. Follow-up work on such cases is relatively easy, but whether or not the findings can be generalized to the larger population is questionable. Evaluative follow-ups have been made for the psychologically deviant, mental patients, those in therapy, and the like. In these cases the dependent variable is some indicator of psychopathology (or its absence). Moreover, the measures often are either therapists' (or other "experts") ratings and/or global personality constructs, such as aggression-dependency. Such findings are generally not of central interest to the sociologist.

²Kelly (1970) is an exception of sorts. Among other instruments, he used what is called Remmers' Generalized Scales. This instrument purports to measure attitudes toward "any activity." It is a quite global idea and best interpreted as favorableness toward the activities required of: marriage, church, rearing children, housekeeping, entertaining, gardening. The intra-individual retest correlations found after 20 years ranged between .06 and .34. Crowell (1972) studied a fairly large (N=1,091) grouping of Syracuse University alumni over a 44-year time span and found them to be "very much less socially distant" toward nationality sets in 1970 than when originally surveyed in 1926. On other measures of discrimination and prejudice, the subjects were shown to be "considerably more liberal." Nelson and Goldman (1969) followed a grouping of

of high school students (N=75) over a seven-year period and found that their favorableness toward the role of working wife changed over time to increasing acceptance though with a pronounced sex difference: females were more strongly in favor of the working wife idea.

³Due to the nature of the original sample design, all of the subjects were essentially the same age and nearly all were white. That homogeneity is both a strength and a weakness. Age and race are controlled and cannot confound the relationships under study. At the same time, generalizations which can be made from the study are limited in terms of the age and race categories represented.

⁴The problem of reliability in survey research is a vexing one. The results of this research imply, however, that more stability may exist in social science variables than is sometimes suggested.

⁵The item concerned with drinking alcoholic beverages was the sole exception to this pattern.

⁶Information for these variables was obtained from the 1971 interview schedules. In all cases the data were given in the form of nominal scales, with the total number of categories ranging from 2 to 9. To simplify the analysis, all of the variables were changed to two categories. This permitted the inclusion of each as a single dummy variable in a multiple regression equation and allowed for a direct assessment of the relative magnitude of the net relationships through beta coefficients. Had a larger number of categories been maintained, a set of dummy variables would have been required to measure each factor and the direct appraisal of the relative importance of the factors would have been more difficult. Dichotomizing the measurement, while admittedly imprecise, seemed adequate

for the exploratory nature of this study. Analysis of variance procedures, showed that the relationships between the Independent variables (using a larger number of categories) and change scores tended to be linear.

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